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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,084	08/26/2003	Srinivas Kandala	SLA1324	2760
7590 Gerald W. Mallszewski P.O. Box 270829 San Diego, CA 92198-2829		09/10/2007	EXAMINER CHURNET, DARGAYE H	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 09/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/648,084

Applicant(s)

KANDALA, SRINIVAS

Examiner

Dargaye H. Churnet

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**Detailed Action**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: timing the next minimum service interval in response to receiving the ACK for the retransmitted first frame, as shown in Fig. 5. Claims 1, 9, 18, 26, 27, and 36 are rejected for this reason.

Claims 2-8, 10-17, 19-25, and 28-35 are rejected as being dependent on rejected independent claims.

***Claim Rejections - 35 USC § 103***

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9, 17, 18, 26, 27, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Sherman (cited 6,831,912 B1).

For claim 1, the admitted prior art discloses in the prior art of Fig. 1, transmitting a first frame from an access point (AP) to a quality of service station (QSTA) and timing the next minimum service interval. The admitted prior art discloses all the subject matter of the claimed invention with the exception of receiving an acknowledgement from the QSTA and, in response to receiving the acknowledgement, retransmitting the first frame from the AP to the QSTA. Sherman from the same or similar fields of endeavor teaches receiving an acknowledgement from the QSTA and, in response to receiving the acknowledgement, retransmitting the first frame from the AP to the QSTA (see Fig. 2, blocks 84, 86, and 88, wherein a datagram message is transmitted from server to client, an acknowledgement is sent from the client to server, and the server resends the datagram message including missing packets specified in the acknowledgement). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Sherman in the network of the admitted prior art. The method taught by Sherman is modified/implemented into the network of the admitted prior art by retransmitting a

message upon the receipt of an acknowledgement. The motivation for receiving an acknowledgement from the QSTA and, in response to receiving the acknowledgement, retransmitting the first frame from the AP to the QSTA is to assure all information is transmitted from source to destination. Claim 9 is rejected for similar reasons.

For claim 18, the claim rejected for similar reasons as claim 1, wherein claim 1 describes transmitting a first frame from an AP to a QSTA, and it is inherent that this transmission would be performed with a transceiver having a wireless media port for transmitting and receiving frames and a control port to communicate transceived information. Claim 1 also describes receiving an acknowledgement from the QSTA, indicating receipt of the first frame and retransmitting the first frame from the AP to the QSTA and it is inherent that some device or "management unit" must perform this action. Lastly, claim 1 describes timing the next minimum service interval in response to the retransmitted first frame, and it is inherent that the timing will be performed by a timer, which in order to be in response to the retransmitted first frame, must be connected to the "management unit". Claims 27 and 36 are rejected for similar reasons.

For claim 17, the admitted prior art discloses all the subject matter of the claimed invention with the exception of following the sending of an acknowledgement to the AP, remaining enabled to receive subsequent transmissions. Sherman from the same or similar fields of endeavor teaches following the sending of an acknowledgement to the AP, remaining enabled to receive subsequent transmissions (see Fig. 2, blocks 86 and

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88, wherein after the acknowledgement is sent from the client, the client is able to receive the retransmission of the datagram message). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Sherman in the network of the admitted prior art. The method taught by Sherman is modified/implemented into the network of the admitted prior art by remaining enabled after sending an acknowledgement. The motivation for following the sending of an acknowledgement to the AP, remaining enabled to receive subsequent transmissions is to be able to receive the retransmission of the first frame.

### ***Response to Arguments***

4. Applicant's arguments have been fully considered but are not persuasive. With regards to the 35 U.S.C. 112, second paragraph rejections, the drawing description for figure 5 is " a flowchart illustrating the present invention method for coordinating a power-save interval in an IEEE 802.11 wireless network". In step 509, applicant states "receiving ACK for retransmitted 1<sup>st</sup> frame" and immediately after for step 510 states "timing minimum service interval". Therefore it is interpreted that timing the next minimum service interval is in response to receiving the ACK for the retransmitted first frame. Therefore, the rejection stands.

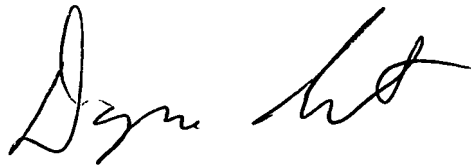
With regards to the 35 U.S.C. 103(a) rejections, applicant argues that Sherman is "absolutely silent of the subject of retransmitting a frame that was successfully received"

is irrelevant because it is not claimed. Sherman discloses in response to receiving the acknowledgement, retransmitting the first frame from the AP to the QSTA, which is what is claimed. Applicant's argument that Sherman is silent on the subject of "using a retransmitted message for the purpose of synchronization in general, or specifically for the purpose of timing a service interval period" is also irrelevant because it is disclosed in the admitted prior art which is combined with Sherman. Therefore, the rejections stand.

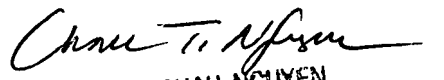
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dargaye H. Churnet whose telephone number is 571-270-1417. The examiner can normally be reached on Monday-Friday from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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